

In the Claims:

Please amend the claims as follows:

1. (Amended) An apparatus, comprising:

an array module having:

a housing having a rear plate and opposing side walls defining a module chamber,

5 a plurality of mounting locations on said side walls of said housing and in said module chamber,

231 a plurality of electronic units having at least one mounting feature fixed thereto, said at least one mounting feature being assembled to at least one of respective ones of said mounting locations so that said  
10 housing supports said electronic units in said module chamber, each of said electronic units having at least one first connector, a plurality of second connectors in said module chamber, each said first connector on said electronic units mating with a respective second connector, and

15 at least one third connector on said housing connected to said plurality of second connectors to provide electrical connection to each of said, plurality of electronic units;

an installation frame having:

a rear wall and opposing side walls defining an installation chamber,

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a plurality of resilient mounts fastened to external surfaces of said

installation frame, each said mount being arranged to be fastened

to a support platform to isolate said installation frame from

mechanical shock or vibration in said support platform,

at least one fourth connector on said installation frame, said at least one

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fourth connector mating with said at least one third connector, and

at least one external connector connected to said at least one fourth

connector for providing electrical connection to said at least one

fourth connector; and

heat transfer means for transferring thermal energy between said electronic units

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and a region exterior to said installation frame.

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7. (Amended) The apparatus of claim 6 wherein said nested first and second rails

extend orthogonal to said rear wall of said installation frame and said rear plate of said array

housing and form a slot along the length of said rails, the apparatus further including

a locking feature for rigidly fastening said array housing to said installation frame.

8. (Amended) The apparatus of claim 1 wherein said heat transfer means

comprises ventilation units through at least one of said rear wall and opposing side walls of said

installation frame, and a plurality of heat transfer features on said side walls of said array module.

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B3

10. (Amended) The apparatus of claim 9 wherein said nested first and second rails extend orthogonal to said rear wall of said installation frame and said rear plate of said array housing and form a slot along the length of said rails, the apparatus further including a locking feature for rigidly fastening said array housing to said installation frame.

13. (Amended) The apparatus of claim 12 wherein said nested first and second rails extend orthogonal to said rear wall of said installation frame and said rear plate of said array housing and form a slot along the length of said rails, the apparatus further comprising a locking feature for rigidly fastening said array housing to said installation frame.

B4

14. (Amended) The apparatus of claim 1 wherein said storage array module includes top, bottom and front walls enclosing said module chamber, and at least one resilient bumper mounted to at least one of said top, front, and bottom walls.

15. (Amended) The apparatus of claim 1 wherein each of said plurality of electronic units is housed in an enclosure having a fifth connector on an end thereof, each said enclosure comprising:

a top cover;

5 a bottom cover arranged to mate with said top cover to form a hermetically sealed enclosure chamber;

a sixth connector on one of said top and bottom covers arranged to mate with said fifth connector;

341  
contd

10 at least two side rails for rigidly fastening to said electronic unit;  
a resilient support connected to said at least two side rails and to at least one of  
said top and bottom covers for resiliently supporting said electronic unit in  
said enclosure chamber, said resilient support being formed of a material  
having a high resistance to thermal conduction;  
at least two thermal rails;  
15 at least one resilient thermal conductor having a first end permanently mounted to  
a respective one of said thermal rails and a second end permanently  
mounted to one of the group consisting of said side rails, said top cover  
and said bottom cover; and  
a fastener removably mounting said thermal rails to another of the group  
20 consisting of said side rails, said top cover and said bottom cover so that  
said thermal rails and resilient thermal conductors provide conduction of  
thermal energy between said side rails and one of said covers.

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20. (Amended) An enclosure for an electronic unit, the electronic unit having at  
least one first connector on an end thereof, the enclosure comprising:

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a top cover;  
a bottom cover arranged to mate with said top cover to form a hermetically sealed  
enclosure;  
at least one second connector on one of said top and bottom covers arranged to  
mate with said first connector;

at least two side rails rigidly fastened to the electronic unit;

a resilient support connected to said at least two side rails and to at least one of

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said top and bottom covers for resiliently supporting the electronic unit in

said enclosure, said resilient support being formed of a material having a

high resistance to thermal conduction;

at least two thermal rails;

at least one resilient thermal conductor having a first end permanently mounted to

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a respective one of said at least two thermal rails and a second end

permanently mounted to one of the group consisting of said side rails, said

top cover and said bottom cover;

a fastener removably mounting said thermal rails to another of the group

consisting of said side rails, said top cover and said bottom cover so that

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said thermal rails and resilient thermal conductors provide conduction of

thermal energy between said side rails and one of said covers.

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26. (Amended) An apparatus, comprising:

an array module having:

a housing having a rear plate and opposing side walls defining a module

chamber,

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a plurality of mounting locations on said side walls of said housing and in

said module chamber,

436  
contd

a plurality of electronic units having at least one mounting feature fixed thereto, said at least one mounting feature being assembled to at least one respective ones of said mounting locations so that said housing supports said electronic units in said module chamber, each of said electronic units having at least one first connector, a plurality of second connectors in said module chamber, each said first connector on said electronic units mating with a respective second connector, and at least one third connector on said housing connected to said plurality of second connectors to provide electrical connection to each of said plurality of electronic units;

an installation frame having:

a rear wall and opposing side walls defining an installation chamber, a plurality of resilient mounts fastened to external surfaces of said installation frame, each said mount being arranged to be fastened to a support platform to isolate said installation frame from mechanical shock or vibration in said support platform,

at least one fourth connector on said installation frame, said at least one fourth connector mating with said at least one third connector, and at least one external connector connected to said at least one fourth connector for providing electrical connection to said at least one fourth connector.

Please add new claims as follows:

27. The apparatus of claim 1 wherein said heat transfer means comprises ventilation units through one or more of said side walls of said installation frame, and a plurality of heat transfer features on said side walls of said array module.

28. An apparatus, comprising:

an array module having:

a housing having a rear plate and opposing side walls defining a  
hermetically sealed module chamber,

a plurality of mounting locations on said side walls of said housing and in  
said module chamber,

a plurality of electronic units having at least one mounting feature fixed  
thereto, said at least one mounting feature being assembled to at  
least one of respective ones of said mounting locations so that said

housing supports said electronic units in said module chamber,

each of said electronic units having at least one first connector,

a plurality of second connectors in said module chamber, each said first

connector on said electronic units mating with a respective second  
connector, and

15 at least one third connector on said housing connected to said plurality of  
second connectors to provide electrical connection to each of said,  
plurality of electronic units;

an installation frame having:

20 a rear wall and opposing side walls defining an installation chamber,  
a plurality of resilient mounts fastened to external surfaces of said  
installation frame, each said mount being arranged to be fastened  
to a support platform to isolate said installation frame from  
mechanical shock or vibration in said support platform,  
at least one fourth connector on said installation frame, said at least one  
25 fourth connector mating with said at least one third connector, and  
at least one external connector connected to said at least one fourth  
connector for providing electrical connection to said at least one  
fourth connector; and  
heat transfer means for transferring thermal energy between said electronic units  
30 and a region exterior to said installation frame.

29. The apparatus of claim 28 wherein each of said plurality of electronic units is  
housed in an enclosure having a fifth connector on an end thereof, each said enclosure  
comprising:

a top cover;



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a bottom cover arranged to mate with said top cover to form a hermetically sealed enclosure chamber;

a sixth connector on one of said top and bottom covers arranged to mate with said fifth connector;

at least two side rails for rigidly fastening to said electronic unit;

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a resilient support connected to said at least two side rails and to at least one of said top and bottom covers for resiliently supporting said electronic unit in said enclosure chamber, said resilient support being formed of a material having a high resistance to thermal conduction;

at least two thermal rails;

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at least one resilient thermal conductor having a first end permanently mounted to a respective one of said thermal rails and a second end permanently mounted to one of the group consisting of said side rails, said top cover and said bottom cover; and

a fastener removably mounting said thermal rails to another of the group

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consisting of said side rails, said top cover and said bottom cover so that said thermal rails and resilient thermal conductors provide conduction of thermal energy between said side rails and one of said covers.

30. The apparatus of claim 28 further comprising at least two mounting plates mounted to one of said top and bottom cover, said thermal conductors having their second ends permanently mounted to a respective side rail, and wherein said fastener mounts said thermal rails to respective mounting plates.

31. The apparatus of claim 30 wherein said resilient support comprises resilient bumpers mounted between said respective side rails and respective mounting plates.

32. The apparatus of claim 29 wherein said resilient support comprises a molded resilient isolator between said electronic unit and at least one of said top and bottom covers to support said electronic unit in said enclosure

33. The apparatus of claim 29 further comprising a circuit board within said enclosure chamber, and a flexible cable connector connected to said circuit board for connecting to said electronic unit.

34. The apparatus of claim 1 wherein said storage array module includes top, bottom, side and front walls enclosing said module chamber, and at least one resilient bumper mounted to at least one of said top, bottom, side and front walls.

35. The apparatus of claim 1 wherein each of said plurality of electronic units is housed in an enclosure having a fifth connector on an end thereof, each said enclosure comprising:

a top cover;

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a bottom cover arranged to mate with said top cover to form a hermetically sealed enclosure chamber;

a sixth connector on one of said top and bottom covers arranged to mate with said fifth connector;

at least two side rails for rigidly fastening to said electronic unit;

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a thermally conductive resilient support connected to said at least two side rails and to at least one of said top and bottom covers for resiliently supporting said electronic unit in said enclosure chamber and for conducting thermal energy between said two side rails and one of said top and bottom covers.

36. An enclosure for an electronic unit, the electronic unit having at least one first connector on an end thereof, the enclosure comprising:

a top cover;

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a bottom cover arranged to mate with said top cover to form a hermetically sealed enclosure;

at least one second connector on one of said top and bottom covers arranged to mate with said first connector;

at least two side rails rigidly fastened to the electronic unit;

a thermally conductive resilient support connected to said at least two side rails

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and to at least one of said top and bottom covers for resiliently supporting  
said electronic unit in said enclosure chamber and for conducting thermal  
energy between said two side rails and one of said top and bottom covers.

37. An apparatus, comprising:

a stack of at least two enclosures for electronic units, the electronic units having a

first connector on an end thereof and, each said enclosure comprising:

a top cover;

a bottom cover arranged to mate with said top cover to form a hermetically  
sealed enclosure;

at least one second connector on one of said top and bottom covers  
arranged to mate with said first connector;

at least two side rails rigidly fastened to the electronic unit;

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a resilient support connected to said at least two side rails and to at least  
one of said top and bottom covers for resiliently supporting the  
electronic unit in said enclosure, said resilient support being  
formed of a material having a high resistance to thermal  
conduction;

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at least two thermal rails;

at least one resilient thermal conductor having a first end permanently

37  
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mounted to a respective one of said at least two thermal rails and a second end permanently mounted to one of the group consisting of said side rails, said top cover and said bottom cover;

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a fastener removably mounting said thermal rails to another of the group consisting of said side rails, said top cover and said bottom cover so that said thermal rails and resilient thermal conductors provide conduction of thermal energy between said side rails and one of said covers.

37  
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38. An apparatus, comprising:

a stack of at least two enclosures for electronic units, said electronic units having

a first connector on an end thereof, each said enclosure comprising:

a top cover;

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a bottom cover arranged to mate with said top cover to form a hermetically sealed enclosure chamber;

a sixth connector on one of said top and bottom covers arranged to mate with said fifth connector;

at least two side rails for rigidly fastening to said electronic unit;

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a thermally conductive resilient support connected to said at least two side rails and to at least one of said top and bottom covers for resiliently supporting said electronic unit in said enclosure chamber and for